

Schumacher, Hans J. and Sprenger, G.
THE REACTION BETWEEN NITROGEN PENTOXIDE
AND OZONE. 8 Feb 61, 20p. (fig. omitted) 23 refs.
Order from SLA \$1.60 63-10601

Trans. of Zeitschrift für Physikalische Chemie,
[Leipzig] (Germany) 1928, v. 136A, p. 77-92.

DESCRIPTORS: Chemical reactions, *Oxides, *Nitrogen
compounds, *Ozone, *Reaction kinetics, Decomposi-
tion, Molecular spectroscopy.

It is shown that a bimolecular reaction takes place
between N_2O_5 and O_3 . The reaction is probably a chain
reaction. Its rate can be represented by the equation

$\frac{dC}{dt} = 8.7 \cdot 10^{15} e^{-\frac{22000}{RT}} \cdot C_1 \cdot C_2$. It has been
shown spectroscopically that with the action of ozone
(Chemistry--Physical, TT, v. 10, no. 1) (over)

63-10601

I. Schumacher, H. J.
II. Sprenger, G.

Office of Technical Services

The Viscosity of Some Gases and Vapors. II. Hg,
Cd and Zn, by H. Braune, R. Basch.
GERMAN, per, Zeit Phys Chem, Vol 137 A, 1928,
pp 447-457.
AEC-ANL-Trans-615

Sci-Phys
August 68

357,549

Traube, J. and Whang, Star-hong.
ON FRICTION CONSTANTS AND WALL LAYER
[PT.] I. [1962] 23p. 18 refs.
Order from SLA \$2.60

62-16454

Trans. of Zeitschrift für Physikalische Chemie
Leipzig (Germany) [1928] v. 138A, no. 1/2, p. 102-122.

DESCRIPTORS: *Friction, Surface tension,
*Permeability, Fluid flow.

62-16454

I. Traube, J.
II. Whang, Star-hong

(Chemistry--Physical, TT, v. 10, no. 6)

Office of Technical Services

Molecular Weight and Constitution of
Hypophosphoric Acid, by A. Rosenheim,
N. Zilg, 12 pp.

GERMAN, per, Z Physik Chem, Vol CXXXIXa,
1928, pp 12-21.

NOT RELEASABLE TO FOREIGN NATIONALS

CIA/FDD XX-315

Sci - Chem

Jun 57

IAC INTERNAL USE ONLY

49,460

<p>Harteck, Paul. THE VISCOSITY OF ATOMIC HYDROGEN (Die Innere Reibung des Atomaren Wasserstoff). [1960] [15]p. 1 ref. Order from SLA mi\$2.40, ph\$3.30 60-18021</p>	<p>60-18021 1. Hydrogen--Viscosity 1. Harteck, P.</p>
<p>Trans. of Z[eitschrift-für.] Phys[ikalische] Chem[ie], Leipzig [Germany] 1928, v. 139A, p. 98-[106].</p>	
<p>148,449</p>	
<p>(Unannounced)</p>	<p>Office of Technical Services</p>

63-20131

Riesenfeld, E. H. and Gurian, D.
ON THE INTERMEDIATE PRODUCTS OF THE
COMBUSTION OF METHANE (Über die Zwischen-
produkte der Methanverbrennung). [1963] [61p]
(foreign text included) 13refs
Order from SLA \$6.60

63-20131

I. Riesenfeld, E. H.
II. Gurian, D.

Trans. of Zeitschrift für Physikalische
Chemie, Leipzig (Germany) 1928, v. 139A,
p. 169-197.

DESCRIPTORS: *Methane, *Combustion, Formalde-
hyde, Carbon compounds, Monoxides, Hydrogen com-
pounds, Peroxides, Ozone, Carbon dioxide, Water.

(Chemistry--Physical, TT, v. 10, no. 10)

Office of Technical Services

The Interference of Characteristic Vibrations
as the Cause of Energy Fluctuations and Chemical
Changes, by M. Polanyi, E. Wigner.

GERMAN, per, Zeitschrift Fur Physikalische Chemie
Section A, Vol 139, 1928, pp 439-452.

Dept of Navy APL/JHU T-2148

NASA TT F-10, 780 640

Sci
Dec 68

368,675

Chemical Reactions Occuring in Solid
Salts, by C. Tubandt, 18 pp.
GERMAN, per, Z. Phys. Chem, A140, 1929
pp. 291-308.
*NBS TT 70-57847

Sci/phys
Jun 70

Electrochemical Investigations on Ethereal
Solutions II(1) The System: Arsenic Trichloride-
Diethyl-Ether, by M. Ussanovitch, 6 pp.

GERMAN, per, Zeit fuer Physik Chemis, Vol
CXL A, No 5/6, 1929, pp 429-434.

A.E.R.E. Harwell Tr 640

Sci - Electricity, ENE Chemistry,

Jul 1956

36,336

Influence of Electrical Discharge on Gas Containing
Hydrocarbons at Diminished Pressure, by Franz Fischer,
Kurt Peters, 12 pp.

GERMAN, per, Z fuer Physik Chemie, Vol CXLIIA, No 3,
1929, pp 180-194.

SLA 59-10026

Sci - Physics
May 59
OTS V.I, No 8

88,093

Optical Investigations on Electrochemically
Activated and Passivated Metallic Reflectors,
by L. Tronstad, 48 pp.
GERMAN, per, Zeitschrift für Physikalische Chemie.
Series A, Vol 142, No 4, 1929.
ACSI J-3507
ID 2204048067

Sci-Chem
Feb 68

349,183

On the Mechanism of the Catalytic Decomposition
of Hydrogen Peroxide by Colloidal Silver, by
S. Wiegel

HERMAN, per, Z Physik Chem, Vol CXLIIIA,
1929, pp 81-93.

Natl Res Council Canada TT 360

Scientific - Chemistry
Aug CTS/DEK

16,857

The Dynamic Allotropic States of Selenium,
Part 1, by G. Briegleb.
GERMAN, per, Z. Physik Chem, Vol A144, No
5-6, 1929, pp 321-339.
ATS 1211-GJ

Sci - Earth Sci
Aug. 67

338,283

The Dynamic-Allotropic States of Selenium,
Pt. 2, by G. Briggleb.
GERMAN, per, Zeitschrift fuer Physikalische
Chemie, Vol 144A, 1929, pp 340-58.
ATS-40791G

ATS 1212-0J

331, 501

Sci - Chem
Jul 67

V
The Viscosity and Elasticity of Sols, by B.
Rabinowitsch, 16 pp.

GERMAN, per, Zts fuer Physikalische Chemie, Part
A, Vol CXLV, No 1, 1929, pp 1-26.

B.L.A. Tr Ld 517/1955

ATS/994-6J

45,870

Sci - Chemistry
Mar 1957 CTS/dex

Solubilities and Conductivities of Inorganic and Organic Compounds in (HF), by K. Fredenhagen, G. Cadenbach, 33 pp.

GERMAN, per, Zeit Phys Chem, Vol CXLVI A, 1930, pp 245-280.

7093005

RAE Tr-861
S.L.A. Tr 866/1956

39,050

Sci - Chemistry

The Determination of Equilibrium Constants of
Chemical Reactions by Potentiometric Titration,
by F. L. Hahn, R. Klockmann, 19 p.

GERMAN, per, Zeit für Physik Chemie, 1930,
Vol CXLVIA, No 5, pp 373-404.

SLA 59-20387

Sci
Feb 60
Vol 2, No 12

108,246

Adsorption Experiments With Heavy Noble Gases,
by Kurt Peters, Kurt Weil.

GERMAN, per, Zeit Physik Chem, Vol CXLVIII(A),
1930, pp 1-26.

ABC Tr 2470

Scientific - Physics

36,290

Jun 56 CTS/dex

Melting Points and Vapor Pressures of Krypton
and Xenon, by Kurt Peters, Kurt Weil, 12 pp.

GERMAN, per, Zeit Physik Chem, Vol CXLVIII, A,
1930, pp 23-35.

AEC Tr 2424

Sci - Chemistry, Physics. 33, 262

Apr 56

Viscosity of Cellulose Solutions as a Function of
the Temperature, by E. Berl, H. Umstatter, 3 p.

GERMAN, per, Zeit fur Physikal Chemie Leipzig, 1930,
Vol CXLVIII, [A], No 6, pp 471-474.

EMA 59-20386

Sci
Feb 60
Vol 2, No 12

108,240

Helium Researches. VIII. A Method of
Quantitative Measurement of Small Amounts
of Helium by P. Paneth and Wm. D. Urray,
14 pp.

GERMAN, per, Zeit Physik Chem, Vol (A)152,
1931, pp 110.

AAEC-Rt-14

Sci - Chem
Oct 68

241
[REDACTED] 122

The Formation of Ethylene and Acetylene from Methane
in Electrical Discharges, by Kurt Peters, O. H. Wagner,
23 pp.

GERMAN, per. Z fur Physikalische Chemie, Vol CLIIIA,
No 3/4, 1931, pp 161-186.

SLA 59-10062

Sci - Chem
OTS I, 9
Jun 59

89,527

Saline Compounds and Intermetallic Phases of Sodium
in Liquid Ammonia. First Report on Metals and Alloys,
by E. Zintl, J. Goubeau, et al, 43 pp.
GERMAN, per, Z. fur Physikalische Chemie,
Vol CLIVa, 1931, pp 1-46. *9224662*
AEC-ANL-Tr-8

Sci-Chem
Aug 64

262,920

Polyplumbides, Polystannides and Their Transition
in Mental Phases. Part II. Communication on
Metals and Alloys, by E. Zintl, A. Harder, 41 pp.
GERMAN, per, Z fuer Physikal Chemie, Vol CLIVa,
1931, pp 47-91. 92248248
AEC-ANL-Tr-34

Sci-Chem; Mat & Met
Nov 64

268,726

On the Preparation of Debye-Scherrer Diagrams
of Air-Sensitive Alloys, by E. Zintl, A. Harder,
et al, 5 pp.
GERMAN, per, Z fuer Physikalische Chemie, Vol KCLIVa,
1931, pp 92-96.
AEC-ANL-Tr-37

Sci-Phys
Dec 64

269,935

Concerning the Events in the Solution and
in the Gas Space at the Glow-Light Electrolysis
by Alfons Klemenc, Hans F. Hohn.
GERMAN, per, Zeit fur Physikalische Chemie
Vol CLIVA No 5/6, 1931, pp 385-420.
SLA TT 64-20322

May 67

327,217

The Shape of the Particles in Na Oleate Hydrosols,
By P.A. Theissen and E. Triebel.
GERMAN, per, Zeitschrift fur Physikalische Chemie,
1931, vol. 156A, pp. 309-316.
ATS-59R78G

Chem
Aug 66

7
306,643

The Problem of Electrolytic Metal Overpotential,
by T. Erdey-Gruz & H. Volmer.

GERMAN, per, Zeitschrift für Physikalische
Chemie, Vol A157, No 3/4, 1931, pp 165-181.

NASA TT F-11,512

Sci/Phys
Apr 68

351,418

On the Theory of the Ludwig-Soret Effect, by B. Bruzis,
18 pp.
GERMAN, per, Z fuer Physikalische Chemie,
Vol CLVIIa, 1931, pp 422-434. 922 055 3
AEC-Tr-6282

Sci-Phys
Mar 64

252,825

Validity of Lambert-Beer Law for Colloids,
by B. Lange.

GERMAN, per, Z. fuer Physikalische Chemie,
Vol XLIX(a), No 4, 1932, pp 277-294.

CSIRO

Sci - Chem
May 62

196, 427

Distribution Numbers for Hydrogen Fluoride in
the Binary System (H_2O-HF) at $25^{\circ}C$ and the Boil-
ing Point Curve of This System at Atmospheric
Pressure, by Karl Fredenhagen, Marianne Wellmann,
13 pp.

GERMAN, per, Zts. für physikalische Chemie,
Vol CLXIIA , OCT 14, 1932.

S.L.A. Tr 184

32,875

EEur - Germany
Scientific - Chemistry

A torsion method for measuring very
low vapor pressures, by Kurt Reumann,
Ernst Volker, 14 pp.

GERMAN, per, Z. fur Physikalische Chemie,
Vol. CXXI, 1932, pp 33-45. 9069041

ABC Tr-5317

Sci - Phys
Dec 62

217,362

The Electrical Resistance of Palladium Wires
Charged With Hydrogen Between 160° and 310°, by
Hans Bruning, Adolf Sieverts, 33 pp.

GERMAN, per, Z Physik Chem, Vol CLXIIIa, 1933,
pp 409-411.

AEC 3294

Sci - Nuc Phys

Set 50

70,000

Refractometric Investigations, REVUE, A Rotary
Chamber For the Interferometric Determination of
the Refractive Indices of Solutions, by A. Kreis,
W. Goffken, 10 p.

GERMAN, rev, Zeit fur Physik Chem, 1933,
Vol. CKVIA, No 1, pp 16-22.

SLA 59-20830

Sol
Mar 60
Vol 3, No 1

110,884

Contribution to the Knowledge of Manganese Oxides,
by LeBlanc, M. G. Wehner.

GERMAN, per, Z Physik Chem, 1933, Vol 168A, pp 59-78.

*AEC

15 Jun
Sci

Solubilities, Conductivities, and Boiling
Point Elevations of Inorganic and Organic
Compounds in Liquid Hydrogen Fluoride, by
K. Fredenhagen.

GERMAN, per, Zeit Physik and Chem, Vol
CLXIVA No 3/4, 1933, pp 176-200. 9084229

RAE Farnborough Tr 551

Sci - Chemistry

31,762

Glow-Light Electrolysis, IV, by
Alfons Klemenc, Hans F. Hohn.
GERMAN, per, Zeit fur Physikalische Chemie,
Vol CLXVIA, 1933, pp 343-356.
SLA TT 64-20324

May 67

327,218

Kinetic Measurements on Strong Concentrated Acids,
by B. Blaser, 19 pp.

GERMAN, per, Z Physik Chem, Vol CLXVIIa, 1934,
pp 441-457.

NOT RELEASABLE TO FOREIGN NATIONALS
CIA/FDD XK-316

Sci - Chem

Jun 57

IAC INTERNAL USE ONLY

49,462

An Optical Method for the Study of Concentration Polarization During Electrolysis,
by A. G. Samarsov, 21 pp.
GERMAN, per, Zeit Phys Chemie, Vol 168A, No 1,
1934, pp 45-58. PS11144767
AEC UCRL Tr-10082

326,286

Sci - Materials

The Absorption of Capacity of Solid Cobalt for
Hydrogen and Nitrogen, by A. Sieverts, H. Hagen,
10 pp.

GERMAN, per, Z Physik Chem (Leipzig), Vol CLXIXa,
1934, pp 237-240.

ABC UCRL-Trans-620(L)

Sci - & Phys, Chem
Apr 61

149,024

Stackelberg, M. v.
SOLUBILITY OF KRYPTON AND XENON IN LIQUID
OXYGEN. [1962] [13]p. 4 refs.
Order from SLA \$1.60

62-20080

Trans. of Zeitschrift für Physik[altache] Chemie,
Leipzig] (Germany) 1934, v. 170A, p. 262-272.

DESCRIPTORS: *Liquid oxygen, *Xenon, *Krypton,
Solubility.

The solubilities of solid krypton and xenon in liquid oxygen have been determined for the temperature range of 70° to 90°K. The saturation points were obtained from vapor pressure measurements. It was found that the actual solubilities were smaller than the solubilities calculated from the heats of fusion of the rare gases assuming ideal behavior of the systems. For this reason, the heats of solution of the rare gases in O₂ (Chemistry--Physical, TT, v. 9, no. 10) (over)

62-20080

I. Stackelberg, M. v.

Office of Technical Services

R-4913-D

On the Theory of Crystallization Velocity,
by R. Kaischew, I. N. Stranski.
GERMAN, per, Z fuer Physik Chem, Vol CLXXa, 1934,
pp 295-299.

*JPRS/Army/CRREL

Sci
Feb 65

Staudinger, H. and Heuer, W.
CONNECTIONS BETWEEN SOLVATION, SOLUBILITY,
AND VISCOSITY OF POLYSTYRENES. II. VISCOSITY
MEASUREMENTS. Communication 101 of High-Mole-
cular Compounds. [1963] [49p] (figs omitted) 50refs
Order from SLA \$4.60 63-18972

Trans. of ~~Z[eitschrift für] Physik[allghe] Chem[ie],
Leipzig], (Germany) 1934, v. 171A, Nov/Dec,
p. 147-180.~~

DESCRIPTORS: *Styrene plastics, Solubility, Vis-
cosity, Chemical precipitation, Molecular weight,
*Solvents, *Malonic esters, *Benzenes, *Ketones,
*Colloids.

(Materials--Plastics, TT, v. 10, no. 12)

63-18972

I. Staudinger, H.
II. Heuer, W.
III. Title: Viscosity . . .
IV. Title: High-Molecular . . .

Office of Technical Services

The Electrolytic Dissociation of Heavy Water, by
E. Abel, E. Bratu, O. Redlich, 10 pp.

GERMAN, per, Z. physik Chem, (A) Vol CXXXIII,
1935, pp 353-364.

05G5G
ANC Tr 2091

Scientific - Nuclear Physics Mar 55 CTS/DEX

Avail from Associated Technical Serv
(Tr 0505G), East Orange, N. J.

22,523

Production of Deuteriobenzene (Benzene-D₆), by
A. Klit, A. Langseth, 17 pp.

GERMANY, per, Z Physik Chem, Vol A CLXXVI, 1936,
pp 65-80.

ABC Tr 3507

Sci - Chem
Feb 59

81, 310

Melting-Point Diagrams of Several Binary Systems
of Condensed Cases, by E. Veith, E. Schroder,
8 pp.

GERMAN, per, Z. Physik Chem, Vol CLXXIXA, 1937,
pp 16-22.

AEC Tr 2629

Sci - Physics

40,166

Study of the Theory of Osmotic Pressure and
the Ulmann Method for the Measurement Thereof.
Preliminary Experiments at Higher Temperatures,
Employing This Method, by K. Wohl.

GERMAN, per, Z. fuer Physikalische Chemie,
Vol CLXXIXa, 1937, pp 195-209.

CSIRO

Sci - Phys
May 62

198, 497

Heteropolar Molecular Colloids. II. Viscosity of
Solutions of Polyacrylic Acid and its Salts. Rep.
On High Polymer Compounds, by Werner Kern.
German, per, Zeitschrift fur Physikalische Chemie,
1938, Vol. 181A
SLA-TT-64-20404

Chem
Aug 66

7
3057636

TT-63-20650

Mampel, Kurt L.
TIME-TRANSFORMATION FORMULAS FOR HETEROGENEOUS REACTIONS AT THE PHASE BOUNDARIES OF SOLIDS. I. THE DEVELOPMENT OF THE MATHEMATICAL METHOD AND DERIVATION OF SURFACE TRANSFORMATION FORMULAS. [1963]

17p 24refs
Order from SLA \$1.60

TT-63-20650

I. Mampel, K. L.
II. Title: Development ...

AEC/LA/TR-71-8

Trans. of [Zeitschrift für Physikalische Chemie, Leipzig (Germany) 1940, v. 187a, p. 43-57].
(Abstract available)

DESCRIPTORS: *Reaction kinetics, Solids, Chemical reactions, Equations, Corrosion, Combustion, Ores (Metal sources), Heat treatment, Dehydration, Phase studies.

The principal conceptions about heterogeneous reaction kinetics are listed. Hitherto, transformation formulae (Chemistry--Physical, TT, v. 11, no. 3) (over)

Office of Technical Services

TT-63-20649

Mampel, Kurt L.
TIME-TRANSFORMATION FORMULAS FOR
HETEROGENEOUS REACTIONS AT THE PHASE
BOUNDARIES OF SOLIDS. II. THE TIME-
TRANSFORMATION FORMULAS FOR A POWDER
CONSISTING OF SPHERICAL PARTICLES. [Nov 53]
1Sp 1ref
Order from SLA \$1.60 TT-63-20649

I. Mampel, K. L.
II. Title: Time ...

AEC/LA/TR-71-9

Trans. of [Zeitschrift für Physikalische Chemie,
Leipzig (Germany) 1940, v. 187a, p. 235-249].
(Abstract available).

DESCRIPTORS: *Reaction kinetics, Solids,
Chemical reactions, Equations, Corrosion, Com-
bustion, Ores (Metal sources), Heat treatment,
Dehydration, Phase studies.

A method developed earlier is used to calculate the
time-transformation formula for a powder consisting
(Chemistry-Physical, TT, v. 11, no. 3) (over)

Office of Technical Services

Näsänen, Reino.
THE POTENTIOMETRIC DETERMINATION OF THE
SOLUBILITY PRODUCT OF MAGNESIUM HYDROX-
IDE. [1962] 14p. 23 refs.
Order from SLA \$1.60

62-18009

Trans. of Zeit[schrift für] Physik[ische] Chem[ie].
Leipzig [Germany] 1941, v. 188A, p. 272-283.

DESCRIPTORS: *Magnesium compounds, *Hydroxides,
Determination, Electrolytic titration, Solubility,
Mathematical analysis.

General equations are deduced which are needed for
the determination of the solubility product from the
maximum change of potential and adapted for the
special case of magnesium hydroxide. The concen-
tration solubility product of magnesium hydroxide is
determined at different contents of KCl. The thermo-
dynamic solubility product as calculated according to
(Chemistry--Analytical, TT, v. 8, no. 9) (over)

62-18009

I. Näsänen, R.

Office of Technical Services

Calculation of Velocity Constants From Experimental
Data, by J. A. Christiansen, 8 pp.

NEUMAN, par, 2 fuer Physikalische Chemie, Vol CLXXXIX(A)
1941, pp 126-130. 9099217

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ABC Tr-5217

Jci - Phys, Chem
May 62

193,708

A Multiplicative Procedure for the Separation
of Gas Mixtures, Especially by the Gravita-
tional Fields, by H. Martán, W. Kuhn, 94 pp.

GERMAN, per, Z. phys Chem., A, Vol CXXXIX,
pp 219-316.

SIA Tr 57-2582
ABC Tr-287

Sci
Aug 58

68,568

AEC. (LA-tr-71-8) TIME-DEPENDENT CONVERSION
FORMULAS FOR HETEROGENEOUS REACTIONS AT THE IN-
TERFACES OF SOLID BODIES. 1. DEVELOPMENT OF THE
MATHEMATICAL METHOD AND THE DERIVATION OF THE
SURFACE CONVERSION FORMULAS. Mampel, K. L. 10
Translated for Los Alamos Scientific Lab., N. Mex., from 15Z.
Phys. Chem. (Leipzig), A; 187: 43-57(1940). 20 14p. 24 Dep.
NTIS.

25

26 chemistry (physical); translations 27 07D

28 MN-4 29 P NSA

AEC ₄(LA-tr-71-9) ₃TIME-DEPENDENT CONVERSION
FORMULAS FOR HETEROGENEOUS REACTIONS AT THE
INTERFACES OF SOLID BODIES. ₂ TIME-DEPENDENT
CONVERSION FORMULAS FOR A POWDER OF SPHERE-SHAPED
PARTICLES. ₄Mampel, K. L. ₁₀Translated for Los Alamos
Scientific Lab., N. Mex., from ₁₃Z. Phys. Chem. (Leipzig), A;
187: 235-40(1940). ₂₀14p. ₂₄Dep. NTIS.

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₂₆chemistry (physical); translations ₂₇07D

₂₈MN-4 ₂₉P NSA

Surface Determinations and Diffusion Measurements
of Means of Radioactive Inert Gases, (Practice and
Quantitative Use of the Emanation Method). II.
Evaluation of the Measurements, by K. B. Zimens.

GERMAN, Ann. N. Physik Chem, Vol CXCLII, 1942,
pp 95-120.

AEC Tr-3911

Sci - Phys

Apr 60

114, 735

On the Electrolytic Dissolution of Platinum by
Alternating Currents, by Rudolf Buer, 45 pp.
GERMAN, per, Zeitschrift für Physikalische
Chemie, Vol 44, pp 81-113.
Dept of Navy NIC tr 2619

Sci/Phys
Sep 68

363,191

The Calculation of the Intermolecular Forces of
Organic Compounds, by M. Dunkel.

GERMAN, per, Z Physik Chem ABT, CXXXVIII, No 12,
pp 42-54.

ASLIB-0839

Sci
Aug 58

68,267

Paneth, Fritz and Peters, Kurt.
HELIUM INVESTIGATIONS. III. THE BEHAVIOR OF
HELIUM TOWARD GLASS AND PALLADIUM, AND
THE QUESTION OF HELIUM COMPOUNDS.
1 May 61, 21p. 35 refs.
Order from SLA \$2.60

63-10536

Trans. of Z[eitschrift] für Physikalische Chemie,
[Leipzig] (Germany) 1928, v. 18, p. 253-269.

DESCRIPTORS: *Helium, Chemical compounds,
*Glass, *Palladium, *Permeability, Temperature,
Separation, Diffusion, Adsorption, Solutions,
Platinum electrodes.

(Chemistry--Physical, TT, v. 10, no. 2)

63-10536

I. Paneth, F.
II. Peters, K.
III. Title: Behavior...

Office of Technical Services

Electrical Conductivity of Ionic Crystals and
in Particular Alkali Halides, by O. Hüb.
GERMAN, per, Z. Phys. Chem., 1B, 1928,
pp 270-274.
*NBS TT 70-57289

Sci-Chem
Aug 70

On Explosion Temperatures of Gas Mixtures at
Different Pressures, by A. B. Sagulin, 13 pp.
GERMAN, per, Zeitschrift für Physikalische
Chemie, Vol 1b, No 3/4, 1926, pp 275-292.
SIA TT-64-18895

336,216

Sci
Aug 67

Schumacher, H. J. and Sprenger, G.
THE REACTION BETWEEN NITROGEN PENTOXIDE
AND OZONE, II. 16 Feb 61, 14p. 9 refs.
Order from SLA \$1.60 63-10602

Trans. of Zeitschrift für Physikalische Chemie,
Leipzig (Germany) 1929, v. 23, p. 267-281.

DESCRIPTORS: *Nitrogen compounds, Oxides,
*Ozone, Chemical reactions, Pressure, Photographic
analysis, Decomposition, Oxidation.

The reaction between nitrogen pentoxide and ozone was investigated in an apparatus which permitted photographic measurement of the reaction mixture and at the same time measuring the pressure. The concentrations of N_2O_5 and O_3 were varied to the widest extent ($N_2O_5 = 1:120$, $O_3 = 1:200$). We succeeded in setting up an equation which represents the reaction course exactly, and in finding a scheme which leads to this equation. (Author)

63-10602

I. Schumacher, H. J.
H. Sprenger, G.

(Chemistry--Inorganic,
TT, v. 10, no. 1)
Office of Technical Services

Optical Relations Between Alkali Phospho-Halides
and Complex Salt Solutions, by Hans Fromherz,
Wilhelm Menschick.

GERMAN, par, Zeit Physik Chem, Vol LIIB, 1929,
pp 1-40.

AEC Tr 2703

42,733

Sci - Chemistry
Feb 1957 CTS/Gax

X-Ray Analysis of Nitrogen-Bearing Ferrochromium,
by R. Blix.

GERMAN, per, Zeitschrift Physikalische Chemie, abt, B,
Vol III, 1929, pp 237-239.

Bratcher Tr No 315

14,923

Scientific - Min/Metals

\$1.00

Characteristics of the Phases of Transition Elements
in Binary Systems With Boron, Carbon, and Nitrogen,
by G. Hagg, 9 pp.

GERMAN, per, Z Physik Chem, Art B, Vol VI, 1930,
pp 221-232.

SIA Tr 2291

Sci - Chemistry
Sep 57

52,904

TT-64-10146

Ootuka, Haruo.
HIGHLY DILUTE SODIUM FLAMES, Na-Br₂,
Na-HgBr₂. [1963] [9p]
Order from SLA \$1.10 TT-64-10146

I. Ootuka, H.

Trans. of Zeitschrift für Physikalische Chemie
[Leipzig] (Germany) 1930, v. 7B, p. 407-422.

DESCRIPTORS: *Sodium compounds, Bromine,
Mercury compounds, *Jet flames, Light, Intensity.

(Chemistry--Physical, TT, v. 11, no. 5)

Office of Technical Services

Measurement of the Rotatory Dichroism in the
Ultraviolet, by Werner HMK Kuh, E. Braun, 9 pp.

GERMAN, per, Z fuer Physikalische Chemie,
Abt, B, Vol VIII, No 5-6, 1930, pp 445-454.

NIN 4-45-62

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Sci - Med

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About the Phase Reaction Mechanism in Solid
Compounds: the Diffusion of Au in Ag, by
W. Jost.
GERMAN, per, Z Phys Chem, No B9, 1930, pp 73-82.
*NBS TT 70-57531

Sci-Mat
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Investigations of Carbides I. The Crystal
Structure of the MeC_2 Carbides, by M. V. Stackel-
berg.

GERMAN, per, Zeit fur Physik, Chemie 9B, 1930,
pp 437-475. 9203650

AEC/Tr 5486

Sci - Chem

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Mar 63

NOV 60

Ignition of Detonating Gas by Quartz or
Porcelain at Low Pressures, by Hubert N. Alvea,
F. Haber, 21 pp.

GERMAN, per, Zeitschrift fur Physikalische
Chemie, Vol X, No 3, 1930, pp 193-204.

SLA 60-14078

Sci

OTS, Vol III, No 7

133,081

X-Ray Investigations of Titanium, Zirconium,
Vanadium and Tantalum Hydrides, by Gunnar Hagg, 30 pp.

GERMAN, per, Z Physik Chem, (XIB Vol), 1930-1931,
pp 433-454.

ABC Tr 3509

Sci - Chem
Feb 59

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AEC⁴ (UCRL-Trans-10536) ⁵ ULTRAVIOLET ABSORPTION
OF FLUORIDE, ⁶ Wartenberg, H. V.; Sprenger, G.; Taylor, J.
¹⁰ Translated for Univ. of California Lawrence Radiation Lab.,
Livermore, from ¹⁵ Z. Phys. Chem. (Leipzig), B; 8: 61-8(1931).
²⁰ 11p. ²⁴ Dep. NTIS.
²⁵

²⁶ chemistry (physical); translations ²⁷ 07D

²⁸ MN-4 ²⁹ P NSA

Agency: **Floctimny Arsenal**

P.O. No. **132-69**

R--10366-D

1 May 1969

Title: **Anwendung der Diffusionsgleichung auf die
Theorie der Kettenreaktionen.**

Author: **Von V. Bursian und V. Sorokin.**

Source: **Zeitschrift für Physikalische Chemie,
B, Vol. 12. (1931).**

pp. 247-267

Language: **German.**

Special instruction: **Please translate & Type 1 copy.**

The Purification of Metals Through
Vaporization, I, by M. Straumanis, 22pp
GERMAN, per, Z. Phys. Chem. B13, 1931
pp. 316-337.
*NBS TT 70-57840

Sci/mat
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The Xenon Lamp, a Light Source for the Farthest
Ultraviolet, by Paul Harteck, F. Oppenheimer, 5 pp.
UNCLASSIFIED

GERMAN, ~~Per~~, Zeitschrift für Physikalische Chemie,
No 15-16(B), 1932, pp 77-81.

AIW Res & Dev Command
Baltimore, Md.

Scientific - Astronomy

T-88 GF

Mar 54 CTS/DEX

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Explanation of Electrolytic Current in
Amalgam and its Alloys, by C. Wagner, 6 pp.
GERMAN, per, Z. Phys. Chem. B15, 1932,
pp. 347-352.
WHBS TT 70-57856

Sc 1/mat
Jun 70

Diffusion of Velocity of Cu in Au, by W. Jost.
GERMAN, per, Z. Physik. Chem., B16, 1932,
pp 123-128.
*NBS TT 70-57382

Sci-Mat
Aug 70

Oxyketones in Solution, 6 pp.
GERMAN, per, Zeitschrift für Physikalische
Chemie, Leipzig, Vol 16b, 1932, pp 213-220.

SIA TT-64-20831

336, 198

Sci
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^Y
Ignition of Oxhydrogen Gas Through (By) Hydrogen
Atoms, by F. Haber, F. Oppenheimer, 20 pp.

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Section B, 1932, pp 443-459.

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Scientific - Chemistry
CTS/DEX

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63-18126

Blussem, Wilhelm and Köberich, Fritz.
DEHYDRATION OF BRUCITE (Die Entwässerung des
Brucits). [1963] [38]p. (foreign text included) 28 refs.
Order from SLA \$3.60 63-18126

I. Title: Brucite
I. Blussem, W.
II. Köberich, F.

Trans. of Z[eitschrift für] Physical[ische] Chem[ie],
Leipzig (Germany) 1932, v. 178, no. 4/5, p. 310-326.

DESCRIPTORS: *Minerals, *Magnesium compounds,
Hydroxides, *Dehydration, *Crystal structure, X-ray
diffraction analysis

(Earth Sciences--Mineralogy, TT, v. 10, no. 11)

Office of Technical Services

Dissociation of Nitrous Oxide on Glowing
Platinum, Part II, By E. Cassel, *E. Cassel*

GERMAN, per, Zeitschrift fuer Physikalische
Section B, Vol XVII, 1932, pp 380-384.

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ERDL, Ft Belvoir
T-1149

Handwritten notes:
Name: *ERDL T-206*
NTC 10-22874
157,992

Sci
Jun 61

Structure of the reaction Products of Alkali
Metals on Graphite, by A Schleede, M. Wellmann,
27 pp.

GERMAN, per, Z Physik Chem (Leipzig), Vol
XVIIID, 1932, pp 1-28.

AEC 3277

Sci - Chem

Apr 59

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About the Relation Between Interatomic
Potentials and Chemical Reactions, by
E. Wigner, 14 pp.
GERMAN, per, Z. Phys. Chem, B 19, 1932.
pp. 203-216.
*NBS TT 70-57860

Sci/chem
June 70

63-16745

Hilpert, S., Wille, A., and Lindner, A.
RELATIONSHIPS BETWEEN FERROMAGNETISM
AND STRUCTURE OF FERRITES (Zusammenhänge
zwischen Ferromagnetismus und Aufbau der Ferrite).
[52]p. (foreign text included) 31 refs.
Order from SLA \$5.60 63-16745

I. Hilpert, S.
II. Wille, A.
III. Lindner, A.

Trans. of Z[eitschrift für] Phys[ikalische] Chem[ie],
Leipzig] (Germany) 1932, v. 188, p. 291-315.

DESCRIPTORS: *Ferromagnetism, Ferromagnetic
materials, *Ferrites, Alkaline earth compounds,
Alkali metal compounds, Zinc compounds, Aluminum
compounds, Tin compounds, Lead compounds, Copper
compounds, Antimony compounds, *Manganese com-
pounds, Iron compounds, *Crystal structure.

(Physics--Solid State, TT, v. 10, no. 6)

Office of Technical Services

63-14813

I. Rabinowitsch, E.

Rabinowitsch, E.
THE PHOTOBROMINATION OF BENZENE. [1963] 15p.
2 refs.
Order from SLA \$1.60 63-14813

Trans. of *Zeitschrift für Physik* [attach] Chem[ic],
Leipzig [Germany] 1932, v. 19B, p. 190-[198].

DESCRIPTORS: *Benzenes, *Bromination, *Photochemical reactions, Thermochemistry, Addition reactions, Substitution reaction, *Lighting systems, Design.

A description is given of a strong intensity monochromator. An estimation of the quantum yield from the bromination of benzene in relation to the wave length, light intensity, concentration and temperature is given and a comparison is made with earlier measurements. A discussion of the thermal and photochemical bromination is included.
(Chemistry--Physical, TT, v. 10, no. 5)

Office of Technical Services

A Test of the "Tunnel Theory" of Heterogeneous
Catalysis With Special Reference to the
Hydrogenation of Styrol, by E. Cremer, M.
Polanyi, 13 pp.

GERMAN, per, Z Physik Chem, Vol XIX, No 6,
Dec 1932, pp 443-450.

SLA 57-2246

May 58

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On the Nature of the Electrical Conductivity of
Alpha-Silver Sulfide, Part I, by Carl Wagner,
ibid.

GERMAN, per, Z Physik Chem, Vol XXIB, 1933,
pp 42-47.

AEC UCRL Tr-753(L)

Sci - Phys, Chem
May 62

193, 550

Atomic Binding in Binary Mg Alloys, by
E. Zintl.
GERMAN, per, Z. Physik Chem., No 21, 1933,
pp 138-155.
*NBS TT 70-53107
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Sci/Mat
Sept 70

Diffusion Study of Some Metals in Au and Ag,
by W. Jost,
GERMAN, per, Z. Phys. Chem.^M B21, 1933,
pp 158-160.
*NBS TT 70-57352

Sci-Mat
Aug 70

The Electrical Properties of ZnO and CdO
by H.H. Baumbach, 13 pp.
GERMAN, per, Z. Phys. Chem, B22, 1933,
pp. 199-211.
*NBS TT 70-57854

Sci/chem
June 70

On the Nature of the Electrical Conductivity of
Alpha-Silver Sulfide, Part II, by Carl Wagner, 3 pp.

BERMAN, per, Z fuer Physikalische Chemie, Vol XXIB,
1933, pp 469-472. 9097108

AEC UCRL Tr-754(L)

Sci - Phys, Chem
Apr 62

190, 497

The Electric Conductivity of Zinc Oxide and
Cadmium Oxide, by H. H. v. Baumbach, C. Wagner,
24 pp.

GERMAN, per, Z Phys Chem, Vol XXII, 1933,
pp . 199-211.

SLA Tr 57-643

Sci - Chemistry, Physics
Sep 57

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Diffusion in Au-Pb and AgPb Alloys, by W. Seith.
GERMAN, per, Z Phys Chem, B22, 1933, pp 350-358.
*NBS TT 70-57353

Sci-Mat
Aug 70

MOLAR REFRACTION IN DILUTE SOLUTIONS, BY W. GEFFCKEN,
A. KRUIS, 17 PP.

GERMAN, PER, Z PHYSIKAL CHEM (B), VOL XXIII, NO 2/3,
1933, PP 175-192.

NIH 7-17-62

SCI - CHEMISTRY

OCT 62

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A Technique for the Measurement of Diffusion Parameters of Gases in Solid Metals, by H. Dumwald, GERMAN, per, Zeit Phys Chem, Vol 24, 1934, pp 53-58.

*Nat Bur Stand TT 70-57804

Sci-Phys
Jul 70

The Mutual Exchange of the Hydrogen Atom Between
Water and Acetone, by Karl Schwarz, Herbert Steiner,
6 pp.

GERMAN, per, Zinn Physic Chem, Vol XXV B, 1934,
pp 153-156.

AEC Tr 1701

ESur - Germany
Scientific - Chemistry

Oct 53 CTS

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61-10857

Glissman, A. and Schumacher, H. J.
THE SPECTRUM OF FLUORINE OXIDE F_2O . [1961]
10p. 6 refs.
Order from SLA mt\$1.80, ph\$1.80 (1-10857)

Trans. of Zeit[schrift für] Physikalische Chemie
[Frankfurt] (West Germany) 1934, v. 24, no. 4,
p. 323-334.

1. Fluorine oxides--
Spectrographic analysis
- I. Glissman, A.
- II. Schumacher, H. J.

151761

Office of Technical Services

(Unannounced)

The Photochemical Formation of Carbon
Tetrachloride From Chloroform and Chlorine, by
Hans-Joachim Schumacher, Kurt Wolff, 14 pp.

GERMAN, per, Z Physik Chem (Leipzig, Vol XXV B,
1934, pp 161-176.

AEC UCRL-Trans 545

Sci - Phys, Chem
26 Oct 60

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AEC (ORNL-tr-2374) CRYSTALLINE STRUCTURE OF
HIGH TEMPERATURE SILVER IODIDE alpha-AgI. Strock,
Lester W. 10 Translated by R. Gregg Mansfield (Oak Ridge Na-
tional Lab., Tenn.), from 15 Z. Phys. Chem. (Leipzig); 25B: 441-
59(1934). 20 17p. 24 Dep. CFSTI.

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26 chemistry (physical); translations 27 07D

28 MN-4 29 P NSA

Surface Determination by Absorption of Water
Molecules, by J. H. Boer, C. J. Dippel, 21 pp.

GERMAN, per, Z Phys Chem, Vol XXV, No 5, May 1934,
pp 399-410. *done*

SLA Tr 57-339

Sci - ~~Chem~~ - *Physics* *49,930*
Jul 57